

**MEDIA PRODUCTION SYSTEM USING FLOWGRAPH  
REPRESENTATION OF OPERATIONS**

**ABSTRACT OF THE DISCLOSURE**

[167] A system for processing images, or clips, as, for example, in a movie or video post production system. The clips are associated with a flowgraph representation that visually depicts all of the operations used to generate the clips. Correspondence between the image and flowgraph representations is tightly maintained so that the user can conveniently switch between, and work among, the different representations. Efficient user interface mechanisms are provided to work with flowgraph items to construct nodes representing operations. Nodes can be joined in an automated, or assisted, manner. Flowgraphs can be automatically generated according to user inputs in other parts of the system. For example, layered effects can have flowgraphs that are automatically generated. A freehand drawing timing capture tool is provided. All operations that contribute to a single (or more) pixel's value can be listed and selectively activated or deactivated to detect a problem. Any input mechanism can be bookmarked with a labeled value so that the labeled value can be called up at a later time to restore a setting, or multiple settings. A method for using a trilinear look-up table to computer various functions where the table resolution can change is disclosed.